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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,493	01/26/2001	David A. Maltz	10767/8	6231

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EXAMINER

STEVENS, ROBERTA A

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/771,493

Applicant(s)

MALTZ ET AL.

Examiner

Roberta A Stevens

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 11-26, 28, 29 and 38-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Gai (U.S. 6032194).

3. Regarding claim 1, Gai teaches (col. 5, lines 35 –53 and figures 2, 3A and 3B) a method for validating network transformation instructions, comprising: determining whether a plurality of network transformation instructions arranged in a first order will result in invalid network state of a computer network if implemented; and if the plurality of network transformation instructions arranged in a first order will result in invalid network state if implemented, rearranging the plurality of network transformation instructions into an order that will not result in an invalid network state if implemented (col. 8 – col. 9, line 48, and col. 11, lines 36- col. 12).

4. Regarding claims 2 and 29, Gai teaches (figures 3A and 3B) determining whether the rearranged instructions will result in an invalid network state if implemented; and repeating until the instructions will not result in an invalid network state if implemented. (col. 9, lines 28 - 48).

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5. Regarding claim 11, Gai teaches (col. 11, lines 36 - col. 12) the determining step is performed by a simulation program.
6. Regarding claims 12 and 19, Gai teaches (col. 8 – col. 9, line 48 and col. 11, lines 36 – col. 12) the determining step is performed by a proof checker.
7. Regarding claims 13 and 20, Gai teaches (figure 3D) proof checker uses a list of acceptable orders of network transformation instructions (col. 12, lines 13-31).
8. Regarding claims 14 and 21, Gai teaches (col. 11, lines 36 – col. 12) the determining step is performed by a resolution theorem prover.
9. Regarding claims 15 and 22, Gai teaches (figure 3D) resolution theorem prover uses as axioms a list of acceptable orders of network transformation instructions (col. 12, lines 13-31).
10. Regarding claim 16, Gai teaches (figure 3D) resolution theorem prover uses a list of acceptable orders of network transformation instructions (col. 12, lines 13-31).
11. Regarding claims 17 and 23, Gai teaches (col. 11, lines 36 – col. 12) determining comprises comparing the plurality of network transformation instructions arranged in the first order against a list of acceptable orders.

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12. Regarding claim 18, Gai teaches (figures 3A, 3B and 3D) at least one network transformation instruction is valid.

13. Regarding claims 24 and 38, Gai teaches (col. 8 – col. 9, line 48, and col. 11, lines 36- col. 12) creating the plurality of network transformation instructions.

14. Regarding claims 25 and 39, Gai teaches (col. 8 – col. 9, line 48, and col. 11, lines 36- col. 12) implementing the plurality of instructions in the arrangement that will not result in an invalid network state.

15. Regarding claim 26, Gai teaches (col. 8 – col. 9, line 48, and col. 11, lines 36- col. 12) implementing comprises configuring a plurality of network element in the computer network using the plurality of network transformation instruction.

16. Regarding claim 28, Gai teaches (col. 5, lines 35 –53 and figures 2, 3A and 3B) a system for validating network transformation instructions, comprising: a plurality of network elements in a computer network; and a processor operative to determine whether a plurality of instructions arranged in a first order will result in invalid network state of a computer network if implemented and further operative to re-arrange the plurality of network transformation instructions into an order that will not result in an invalid network state if implemented (col. 8 – col. 9, line 48, and col. 11, lines 36- col. 12).

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17. Regarding claim 40, Gai teaches (col. 5, lines 35 –53 and figures 2, 3A and 3B) a system for validating network transformation instructions, comprising: means for determining whether a plurality of network transformation instructions arranged in a first order will result in invalid network state of a computer network if implemented; and means for, if the plurality of network transformation instructions arranged in a first order will result in invalid network state if implemented, rearranging the plurality of network transformation instructions into an order that will not result in an invalid network state if implemented (col. 8 – col. 9, line 48, and col. 11, lines 36- col. 12).

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

20. Claims 3-10, 27 and 30-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gai.

21. Regarding claims 3-10 and 30-37, as mentioned above, Gai's invention teaches responding to failure within a computer network with reconfiguration techniques.

22. Gai does not specifically name the types of failure in the system, however, destabilized network, partitioned network, violated level agreements, undesirable intermediate state, instructions not implemented completely, demands not met, violated traffic characteristics, and dropped data are all types of network failures that one skilled in the art would adapt to Gai's system to enhance quality of service within the system.

23. Regarding claim 27, Gai does not specifically teach converting the instructions into protocols appropriate for the network elements. However, it would have been obvious to one of ordinary skill in the art to adapt this to Gai's system in order for the data to properly transmit through the system to different devices of the network.

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Conclusion

24. Any inquiry concerning the communication or earlier communications from the examiner should be directed to Roberta Stevens whose telephone number is (703) 308-6607. The examiner can normally be reached on Monday through Friday from 9:00 am to 5:30 p.m.

25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor can be reached on (703) 308-6602.

26. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 305-3900.

27. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 872-9306

For informal draft communications, please label "PROPOSED" or "DRAFT"

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA. Sixth Floor (Receptionist).

Roberta A. Stevens

Patent Examiner

07-09-04



STEVEN NGUYEN
PRIMARY EXAMINER